Environmental Management System Procedure

for

Emergency Preparedness and Response

Applicable to the

U.S. Army Garrison (USAG) Baumholder

21 November 2005

Prepared by:

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Environmental Management System Documentation of the USAG Baumholder

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Emergency Preparedness and Response Applicable to the USAG Baumholder

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Update requirements:

This document is an EMS controlled document. It has to be kept updated in order to comply with International Organization for Standardization (ISO) 14001. This document shall be reviewed annually and revised as necessary or when changes occur. When a revised document is available, this document will be discarded and marked as obsolete in the DOC CON database. The revised document gets a new UID.

Date Document Effective:	**21 November 2005**	**Document POC:**	Dominic Mutinda DPW EMO

Approved by: **Date:**

James E. Larsen — 5 Dec 05

JAMES E. LARSEN
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References:

a. Executive Order 13148, Greening the Government through Environmental Leadership.
b. ISO 14001: 2004, Environmental Management Systems – Specification with Guidance for Use.
c. EMS Procedure # EMS_PBH_09 - *Operating Procedure for the control of Environmental Management System documents of the USAG Baumholder, draft*

1.1 PURPOSE. The purpose of this procedure is to identify potential emergency situations and potential accidents that can have an impact on the environment and how the USAG Baumholder will respond to them.

1.2 APPLICABILITY. This procedure applies to all personnel within the installations of the USAG Baumholder.

1.3 DEFINITIONS

Environmental Aspect —The part of an activity, product, or service that interacts with the environment.

Environmental Impact — Any change to the environment that is caused by an environmental aspect.

2. PROCEDURE

2.1 Identification of potential emergency situations and accidents

The Directorate of Public Works Environmental Management Office (DPW EMO) shall maintain an inventory of all potential emergency situations and accidents that could have an impact on the environment. EMS Table #: EMS_TBH_11_01 in Appendix A will be used for this purpose. This list shall be compiled and kept current by using input from the Garrison's media managers, DPW EMO, Garrison Fire Department, Garrison Safety Officer and Military Police.

2.2 Response to emergency situations and accidents

Since the USAG Baumholder is required by various laws and requirements to maintain emergency preparedness and response plans and management plans, only references to these documents are made for the appropriate potential emergency situations and accidents (See EMS Table #: EMS_TBH_11_01 in Appendix A). If plans do not exist or do not cover a particular potential emergency situation or accident, it is the responsibility of those organizations listed in paragraph 2.1 above to determine the appropriate response actions and to document these actions in EMS Table #: EMS_TBH_11_01 in Appendix A.

2.3 Response to terrorist attacks and intentional acts resulting in environmental impacts

In the event of a terrorist attack or an intentional act that could result in or has resulted in an environmental impact, existing emergency procedures/plans that have been implemented by the Garrison will be initiated where appropriate.

2.4 Maintaining existing emergency preparedness and response plans and other applicable management plans

EMS Table #: EMS_TBH_11_02 in Appendix B identifies the proponents for each emergency preparedness and response plan and management plans referenced in EMS Table #: EMS_TBH_11_01 in Appendix A. It is the responsibility of the identified proponents to ensure that these plans are maintained up-to-date and in accordance with applicable requirements. If changes occur in the plans that could affect the response to a particular potential emergency situation or accident listed in EMS Table #: EMS_TBH_11_01 in Appendix A, the DPW EMO must be notified so that this procedure may be appropriately revised.

It is the responsibility of the proponents for each emergency preparedness and response plan and management plans referenced in EMS Table #: EMS_TBH_11_01 in Appendix A to ensure that periodic tests/simulations are conducted where practicable to ensure the effectiveness of the plans. Tests/simulations are to be conducted according to the individual plans. If a frequency for conducting periodic tests/simulations has not been determined, they should be conducted at least once every two years. If an incident occurs prior to the next scheduled test/simulation that

puts into action a planned response for an emergency, the incident itself may replace the scheduled test/simulation.

2.5 Review of emergency preparedness and response procedure

At least annually and after the occurrence of an emergency situation or accident, the organizations listed in paragraph 2.1 above will meet to review this procedure. This meeting shall be documented through meeting minutes. The DPW EMO will be responsible for addressing comments and revisions of this procedure as a result of the aforementioned review meeting. During the review meeting it should be determined whether all potential emergency situations and accidents listed in EMS Table #: EMS_TBH_11_01 in Appendix A still apply, whether the response procedures are still adequate, and consider the identification of any new potential emergency situations and accidents and methods to responding to them.

2.6 Dissemination of procedure

All emergency procedures and plans listed in EMS Table #: EMS_TBH_11_02 in Appendix B will be distributed to all appropriate personnel and posted on the Garrison's website under a separate link. When new procedures are introduced or existing procedures are revised, all appropriate personnel will be notified and should familiarize themselves with the revised procedures. Old procedures should be collected and destroyed.

LIST OF APPENDICES

APPENDIX A

Potential Emergency Situations and Accidents Applicable to the USAG Baumholder

(EMS Table #: EMS_TBH_11_01)

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Potential Emergency Situations and Accidents Applicable to the USAG Baumholder

(EMS Table #: EMS_TBH_11_01)

Environmental Media Area	Facility/Activity	Nature of On-Site Hazard(s)	Most Likely Type of Emergency	Scale of Emergency (P,S,H;C)	Method for Responding to Emergency
Air Emissions	Heating plants	Generation of particulate, CO, NOx, SOx emissions	Failure of pollution prevention devices and/or increased generation of emission resulting in regulatory exceedances	Low (2,1,1,2)	O&M division shuts down the plants
	Refrigerating units	Storage of ODSs	Release of ODSs to ambient air	Low (1,2,1,2)	Fire Department responds and with help of O&M technical personnel resolves the issue
	Fire extinguishing systems	Storage of ODSs	Release of ODSs to ambient air	Low (1,2,1,1)	Fire Department responds
	Carpentry/woodworking shops	Generation of wood dust	Failure of pollution prevention devices which could lead to explosive atmosphere	Low (1,1,2,1)	Fire Department plus technical personnel at shop respond together
	Paint booth/shop	Flammable/combustible materials storage/use	Failure of pollution prevention devices and/or increased generation of emission resulting in regulatory exceedances and/or explosive atmosphere	Low (1,1,2,1)	Personnel shut down the plant. Fire Department standby
	Landfill	Methane gas generation	Failure of collection system could result in explosion	Moderate (1,2,3,2)	Fire Department standby to put out fire
	Compressed gas cylinders	Oxygen, CO_2, nitrogen, acetylene gases	Accident resulting in a release of contents, explosion, and/or flying projectile	Low (1,1,3,1)	Fire Department responds
	Drinking water treatment plants/chlorination stations	Chlorine gas	Accident resulting in release of gas, death of personnel in close proximity if PPE not properly used	Low (1,1,3,1)	Fire Department responds and coordinates further actions
	Parts cleaners	Organic solvent emissions	Failure of pollution prevention devices and/or increased generation of emission resulting in regulatory exceedances and/or explosive atmosphere	Low (1,1,2,1)	Discontinue using equipment and call Fire Department

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Environmental Media Area	Facility/Activity	Nature of On-Site Hazard(s)	Most Likely Type of Emergency	Scale of Emergency (P,S,H;C)	Method for Responding to Emergency
	Stationary internal combustion engines/gas turbines/test stands	Generation of particulate, CO, NOx, SOx emissions	Failure of pollution prevention devices and/or increased generation of emission resulting in regulatory exceedances	Low (1,1,1,1)	O&M shuts equipment down.
	Fuel dispensing facilities	Flammable/combustible liquid storage	Failure of pollution prevention devices resulting in explosive atmosphere	Moderate (1,2,2,2)	Fire Department responds
Drinking Water	Drink water treatment plants/chlorination stations	Water treatment chemicals (ferric chloride sulphate, lime water, polymer, ozone, chlorine dioxide, chlorine gas, sodium hydroxide or caustic soda)	Spills resulting in contamination of soil/groundwater/surface water, exposure to unprotected personnel and/or explosive atmosphere depending on the nature of the treatment chemical; failure of treatment system to adequately remove contaminants resulting in potential exposure to consumers	High (2,2,3,3)	Fire Department responds and coordinates with Katastrophenschutz. Env. Coordinates removal of soil contaminates and coordinates with the HN environmental office (county) if needed.
		Regeneration/backwash of GAC filters	Failure in procedures/maintenance activities resulting in breakthrough of GAC filter; spill of backwash water or improper discharge resulting in contamination of soil/groundwater/surface water	Moderate (1,2,3,3)	Fire Department responds and coordinates with Katastrophenschutz. Env. Coordinates removal of soil contaminates and coordinates with the HN environmental office (county) if needed
Wastewater	Wastewater treatment systems	POL separators	Failure in treatment operations or improper use of POL separator resulting in contamination of soil/groundwater/surface water, batch discharge to sewer system and/or explosive atmosphere depending on the nature of the wastewater	Moderate (2,3,1,3)	Stormwater Pollution Prevention Plan, Slug Prevention/Batch Discharge Plan

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Environmental Media Area	Facility/Activity	Nature of On-Site Hazard(s)	Most Likely Type of Emergency	Scale of Emergency (P,S,H;C)	Method for Responding to Emergency
		Grease separators	Failure in treatment operations resulting in contamination of soil/groundwater/surface water and/or batch discharge to sewer system	Moderate (2,2,1,2)	
Hazardous Materials	Hazardous material storage/handling/use	Flammable/combustible/reactive/corrosive/toxic liquids, semi-liquids and/or solids	Failure of pollution prevention devices resulting in contamination of soil/groundwater/surface water, batch discharge to sewer system and/or explosive atmosphere depending on the nature of the hazardous materials	High (2,3,2,3)	Spill Prevention and Response Plan
	Battery Shop	Corrosive	Failure of pollution prevention devices resulting in contamination of soil/groundwater/surface water and/or batch discharge to sewer system	Low (2,2,1,1)	Spill Prevention and Response Plan
		Generation of hydrogen gas during charging	Explosive atmosphere	Low (1,1,3,1)	Fire Department's Fire Protection and Emergency Action Plans
	Transport	Flammable/combustible/reactive/corrosive/toxic liquids, semi-liquids and/or solids	Spill resulting in contamination of soil/groundwater/surface water, batch discharge to sewer system and/or explosive atmosphere depending on the nature of the hazardous materials	High (2,3,2,3)	Spill Plan, Fire Department's Fire Protection and Emergency Action Plans
Hazardous Waste	Hazardous waste accumulation point	Flammable/combustible/reactive/corrosive/toxic liquids, semi-liquids and/or solids	Failure of pollution prevention devices resulting in contamination of soil/groundwater/surface water, batch discharge to sewer system and/or explosive atmosphere depending on the nature of the hazardous wastes	High (2,3,2,3)	Spill Prevention and Response Plan, Fire Department's Fire Protection and Emergency Action Plans
	Hazardous waste storage area	Flammable/combustible/reactive/corrosive/toxic liquids, semi-liquids and/or solids	Failure of pollution prevention devices resulting in contamination of soil/groundwater/surface water, batch discharge to sewer system and/or explosive atmosphere depending on the nature of the hazardous wastes	High (2,3,2,3)	
	Transport	Flammable/combustible/reactive/corrosive/toxic liquids, semi-liquids and/or solids	Spill resulting in contamination of soil/groundwater/surface water, batch discharge to sewer system and/or explosive atmosphere depending on the nature of the hazardous wastes	High (2,3,2,3)	

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Environmental Media Area	Facility/Activity	Nature of On-Site Hazard(s)	Most Likely Type of Emergency	Scale of Emergency (P,S,H;C)	Method for Responding to Emergency
	Disposal	Flammable/combustible/reactive/corrosive/toxic liquids, semi-liquids and/or solids	Delay in pick-up for disposal resulting in overflowing containers increasing potential for spills	High (2,3,2,3)	
Solid Waste	Solid waste storage	Odor and harborage for pests	Delay in pick-up for disposal resulting in overflowing containers increasing the odor and harborage potential (could indirectly result in spread of diseases)	Low (1,1,1,2)	Solid Waste Management Plan
	Transport	Odor and harborage for pests	Spill resulting in unsightly litter and odor	Low (1,1,1,2)	Solid Waste Management Plan
	Landfill	Leachate and methane gas generation	Failure of pollution prevention devices resulting in contamination of soil/groundwater/surface water, release of methane gas to ambient air and/or explosive atmosphere	High (2,3,2,3)	Fire Department responds, EMO coordinates removal of contaminated soil
	Disposal	Odor and harborage for pests	Delay in pick-up for disposal resulting in overflowing containers increasing the odor and harborage potential (could indirectly result in spread of diseases)	Low (1,1,1,2)	O&M coordinates with contractors for help
Medical Waste	Medical waste storage	Infectious substances	Spills resulting in contamination of storage area and potential exposure of unprotected personnel	Low (1,2,2,1)	Fire Department responds together with medical personnel. EMO coordinates removal of contaminated soil. Spill Prevention and Response Plan, Local Clinic HM/HW/Medical Waste SOPs

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Environmental Media Area	Facility/Activity	Nature of On-Site Hazard(s)	Most Likely Type of Emergency	Scale of Emergency (P,S,H;C)	Method for Responding to Emergency
	Transport	Infectious substances	Spills resulting in contamination of soil/surface water, discharge to sewer and potential exposure of unprotected personnel	Moderate (1,2,2,2)	Fire Department responds together with medical personnel. EMO coordinates removal of contaminated soil. Spill Prevention and Response Plan, Local Clinic HM/HW/Medical Waste SOPs
	Disposal	Infectious substances	Delay in pick-up for disposal resulting in overflowing containers and exceedance of regulatory thresholds for waste collection frequency	Low (1,2,2,1)	Local Clinic Medical Waste Contingency Plan
POL	Bulk storage	Flammable/combustible liquid storage/use	Failure of pollution prevention devices resulting in contamination of soil/groundwater/surface water, batch discharge to sewer system and/or explosive atmosphere	High (2,3,2,3)	Spill Prevention and Response Plan, Fire Department's Fire Protection and Emergency Action Plans
	Fuel pipeline	Flammable/combustible liquid storage/use	Failure of pollution prevention devices resulting in contamination of soil/groundwater/surface water, batch discharge to sewer system and/or explosive atmosphere	High (2,3,2,3)	
	Heavy Expanded Mobility Tactical Truck (HEMMT) Refuelers	Flammable/combustible liquid storage/use	Spills resulting in contamination of soil/groundwater/surface water, batch discharge to sewer system and/or explosive atmosphere	High (2,3,2,3)	
	Fuel Stations	Flammable/combustible liquid storage/use	Failure of pollution prevention devices resulting in contamination of soil/groundwater/surface water, batch discharge to sewer system and/or explosive atmosphere	High (2,3,2,3)	
Noise	Airfields/helicopter pads	Noise	Increased levels of noise above regulatory or arranged thresholds and during quiet times	Low (1,1,1,3)	PAO coordinates issues
	Construction	Noise	Increased levels of noise above regulatory or arranged thresholds and during quiet times	Low (1,1,1,3)	

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Environmental Media Area	Facility/Activity	Nature of On-Site Hazard(s)	Most Likely Type of Emergency	Scale of Emergency (P,S,H;C)	Method for Responding to Emergency
	Emergency response	Noise	Increased levels of noise above regulatory or arranged thresholds and during quiet times	Low (1,1,1,3)	
	Increased troop activities/training	Noise	Increased levels of noise above regulatory or arranged thresholds and during quiet times	Low (1,1,1,3)	
Pesticides	Pesticide storage area	Flammable/corrosive/toxic substances	Accidental release resulting in soil/groundwater/surface water contamination, batch discharge to wastewater treatment plant resulting in shut-down of operations and/or explosive atmosphere	High (2,3,2,3)	Pesticide Management Plan, Spill Plan, Fire Department's Fire Protection and Emergency Action Plans
	Pesticide application	Flammable/corrosive/toxic substances	Accidental release resulting in soil/groundwater/surface water contamination, batch discharge to wastewater treatment plant resulting in shut-down of operations and/or explosive atmosphere	High (2,3,2,3)	
Natural Resources	Training areas	Habitat destruction/loss of wildlife	Loss of endangered species and protected habitat; growth and/or spread of unwanted plants and animals	Moderate (3,2,1,2)	INRMP, TES Management Plan
PCB/Ts	Storage/use of PCB-containing equipment/item	Combustible/toxic/carcinogenic substances	Accidental release resulting in soil/groundwater/surface water contamination	High (2,3,2,3)	Spill Prevention and Response Plan, Fire Department's Fire Protection and Emergency Action Plans
	Transport	Combustible/toxic/carcinogenic substances	Accidental release resulting in soil/groundwater/surface water contamination	High (2,3,2,3)	
	Disposal	Combustible/toxic/carcinogenic substances	Accidental release resulting in soil/groundwater/surface water contamination	High (2,3,2,3)	
Asbestos and Artificial Mineral Fibers	Construction/renovation/demolition projects	Carcinogenic substance	Uncontrolled release and/or failure of control measures resulting in release of asbestos dust leading to contamination of buildings/grounds and exposing unprotected personnel	High (2,2,3,3)	Asbestos Mgt Plan, Fire Department's Emergency Action Plans
	Waste storage	Carcinogenic substance	Uncontrolled release and/or failure of control measures resulting in release of asbestos dust leading to contamination of buildings/grounds and exposing unprotected personnel	High (2,2,3,3)	

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Environmental Media Area	Facility/Activity	Nature of On-Site Hazard(s)	Most Likely Type of Emergency	Scale of Emergency (P,S,H;C)	Method for Responding to Emergency
	Transport	Carcinogenic substance	Uncontrolled release and/or failure of control measures resulting in release of asbestos dust leading to contamination of buildings/grounds and exposing unprotected personnel	High (2,2,3,3)	
	Disposal	Carcinogenic substance	Uncontrolled release and/or failure of control measures resulting in release of asbestos dust leading to contamination of buildings/grounds and exposing unprotected personnel	High (2,2,3,3)	
Radon	Housing, schools and administrative areas	Carcinogen	Failure/lack of preventive measures to reduce radon levels to a safe level exposing unprotected personnel	High (3,1,3,3)	Radon Mgt Plan
LBP	Construction/renovation/demolition projects	Toxic substance	Uncontrolled release and/or failure of control measures resulting in release of lead dust leading to contamination of buildings/grounds and exposing unprotected personnel	High (2,2,3,3)	LBP Mgt Plan, Fire Department's Emergency Action Plans
	Waste storage	Toxic substance	Uncontrolled release and/or failure of control measures resulting in release of lead dust leading to contamination of buildings/grounds and exposing unprotected personnel	High (2,2,3,3)	
	Transport	Toxic substance	Uncontrolled release and/or failure of control measures resulting in release of lead dust leading to contamination of buildings/grounds and exposing unprotected personnel	High (2,2,3,3)	
	Disposal	Toxic substance	Uncontrolled release and/or failure of control measures resulting in release of lead dust leading to contamination of buildings/grounds and exposing unprotected personnel	High (2,2,3,3)	
USTs	Waste oil/antifreeze/battery acid storage	Flammable/combustible/corrosive/toxic liquids	Uncontrolled release and/or failure of control measures resulting in release of flammable/combustible/corrosive/toxic substances leading to contamination of soil/groundwater/surface water and/or explosive atmosphere	High (3,3,2,3)	Spill Prevention and Response Plan and Fire Department's Fire Protection and Emergency Action Plans

In order to determine the scale of a potential emergency, the potential severity, probability, health threat and community concern was evaluated, considering a worst case scenario. Each of the four factors was given a score according to the tables below. The four scores were then totalled and compared to the following to determine overall potential scale of an emergency:

Total Score (Four individual factor scored added together)	Scale of Emergency
4-6	Low
7-9	Moderate
10-12	High

The following tables describe the scoring for each of the four factors used to evaluate the scale of each potential emergency or accident listed in EMS Table #: EMS_TBH_11_01 above.

Severity (S)	
Severity Scale	**Severity Description**
1	Minor reversible damage to the environment or cultural resource. Loss exceeding $2K but less than $50K or mitigable environmental damage where restoration activities can be accomplished without violation of law or regulation.
2	Reversible damage to a natural environment, major degradation to a critical natural habitat, natural resource or cultural resource. Replacement cost exceeding $50K but less than $100,000. Reversible environmental damage causing a violation of law or regulation.
3	Irreversible or extreme damage to a natural environment or loss of a critical natural habitat, natural resource or cultural resource. Replacement costs exceeding $100,000.

Probability (P)	
Probability Scale	**Probability Description**
1	Qualitative Definition – Unlikely, but could occur in the life of the system. Quantitative Definition – Probability of occurrence is less than one in a thousand (once every year or two).

Probability (P)	
Probability Scale	**Probability Description**
2	Qualitative Definition – Will occur in the life of the system. Quantitative Definition – Probability of occurrence is less than one in ten but greater than one in a thousand (once per month).
3	Qualitative Definition – Occurs often in the life of the system. Quantitative Definition – Probability of occurrence is greater than one in ten (daily or ongoing).

Health Threat (H)	
Health Threat Scale	**Health Threat Description**
1	Injury or occupational illness not resulting in a lost work day
2	Injury or minor occupational illness resulting in a lost work day
3	Death or permanent partial/total disability or severe injury or occupational illness that may result in hospitalization of at least one person

Community Concern ©	
Community Concern Scale	**Community Concern Description**
1	Community supports the activity or community is unconcerned by the activity
2	Some community concern
3	Serious community concern

APPENDIX B

Emergency Plans/Procedures POC List for the USAG Baumholder

(EMS Table #: EMS_TBH_11_02)

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Emergency Plans/Procedures POC List for the USAG Baumholder

(EMS Table #: EMS_TBH_11_02)

Plan/Procedure	Proponent	POC	Phone Number	Email Address
Asbestos Management Plan (2001)	EMO	MS BONEY	485-6085	
Operational Plan 04-10, Annex c, Appendix 5	DES	MR. RICH	485-7140	
Fire Protection Plan	FIRE DEPARTMENT	MR. KUHN	485-8689	
Hazardous Material/Waste Management SOPs (2000)	EMO	MS. SHEETZ	485-6858	
Integrated Natural Resources Management Plan (2002)	EMO	MR. WEBER	485-8154	
Katastrophenschutzplan	FIRE DEPARTMENT	MR. KUHN/ MR.FUHR	485-8689/ 06782-15332	
LBP Management Plan	EMO	MS. BONEY	485-6085	
Pesticide Management Plan (2004)	B&G	MR. GOSERT	485-7144	
Radon Management Plan	EMO	MS. BONEY	485-6085	
Slug Prevention/Batch Discharge Plan	EMO	MR. WEBER	485-8154	
Solid Waste Management Plan	UTILITIES	MS. BAMBACH	485-8147	
Spill Prevention and Response Plan (2001)	EMO	MS. SHEETZ	485-6858	
Stormwater Pollution Prevention Plan (2005)	EMO	MR. WEBER	485-8154	
Threatened and Endangered Species (TES) Management Plan (2004)	EMO	MR. WEBER	485-8154	